

March 31, 1972

# Army Aviation

## Rotor Rescue

(See back cover . . . )



LYCOMING DIVISION  
STRATFORD, CONNECTICUT, 06497



## AIR CAVALRY IN A MID-INTENSITY ENVIRONMENT

BY MAJOR GENERAL WILLIAM R. DESOBRY  
Commanding General, U.S. Armor Center

I'VE been asked to discuss the experiments that have been taking place in Europe. I think that one of the great things that's going on in our Army today is the fact that no matter where you go — and I've just come back from Europe — overseas and in the U.S., everyone is talking, thinking, solving problems, and working on solutions to air cavalry, and air cavalry in a mid-intensity war.

With all the talent that we have in the U.S. Army, I can assure you that I have no doubt that the problems that are inherent in developing a force that can be effective in mid-intensity warfare in the European environment against a sophisticated enemy are going to be solved! And they are going to be solved soon! We of the Armor School are dedicated to play our part, be it a small one, in the solution of these problems because, in the long run, we're going to come up with the most devastating air-ground cavalry and armor team that the world has ever known.

I think this is inevitable and particularly enjoy hearing the Devil's advocates who question us because I think really they're doing us a favor. They are pushing us harder and harder into the solutions we must achieve and those solutions are inevitable.

We at the Armor School believe firmly in the advice that the late General Patton gave us which was, "Never take counsel of your fears, particularly if you have a good thing going. Make it work!" and we are going to make it work.

### The evaluations in Europe

The principal objectives of the evaluation in Europe were to see if the people there could start on the solutions to mid-intensity combat. The arrival of the Cobra, unfortunately, was too late to allow its participation in the original evaluation. Therefore, a follow-on evaluation was conducted employing an Air Cavalry Troop equipped with Cobras during the period 3 August-14 December 1970.

The objectives of the follow-on evaluation were

Presentation made by Major General William R. Desobry at the 1971 AAAA Annual Meeting in Washington, D.C.

compatible with the objectives of the original tests and emphasized the comparison of the relative effectiveness of the Cobra and that awfully reliable and wonderful "B" model gunship with which I have had so much experience and which I love so much.

The detailed analysis of the objective and subjective data collected during both evaluations are presented in the USAREUR-Seventh Army Air Cavalry Troop evaluation dated July, 1970 and supplemented by the follow-on evaluation report of April, 1971. I'd briefly like to discuss the highlights of these reports, and the capabilities and problem areas that we found.

When visualizing combat operations in Europe one of the first questions that comes to all of our minds is the effects of the unpredictable weather and harsh winter conditions. Is the Air Cavalry Troop capable of operating in European weather?

### Weather not a factor

To determine typical weather conditions for Western Europe, records were examined for sixteen locations dispersed throughout Western Europe. The weather data analyzed covered 24-hour periods and extended for spans of ten years on the average. As might be expected, the examination showed that the worst weather was during November and December. Using a 200-foot ceiling and one-half mile visibility as a required weather condition for the employment of air cavalry assets, the weather data revealed that the Troop could be expected to function 91% of the time.

During the evaluation period itself the weather data obtained and analyzed showed that meteorological conditions in the Air Cavalry Troop area were actually favorable to helicopters over 99% of the time. Now I know these figures are suspect and maybe they've been pushed pretty high, but I think that they show us, without a doubt, that weather is not going to stop us in Europe as we feared.

Regardless of intensive marginal weather, continuous reconnaissance surveillance was carried out in the objective area. Augmented by the employment of aerial rifle elements on long range patrols and observation posts, the Air Cavalry Troop gave the ground commander intelligence and se-



# Army Aviation

MARCH 31, 1972

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**TOP NCO** — SFC Herbert W. Denmark, left, of Savannah, Ga., has been selected as "Non-commissioned Officer of the Year" at Ft. Rucker, Ala. MG Allen M. Burdett, Jr., (center) Post Commanding General, presents the citation which accompanied the Army Commendation Medal that Denmark received recently at the annual Noncommissioned Officer's Ball. Rucker's CSM Clifton A. Wagner holds a \$100 U.S. Savings Bond that also went to SFC Denmark.

## COMMAND & STAFF

"Command and Staff" is a monthly listing of the forthcoming assignments and positions of those active and retired personnel affiliated with Army Aviation who are in the rank of colonel or above. Residence information on those listed may also appear in the "Takeoffs" column.

**Colonel Harold E. Cook**, to EA MTMTS, 58th Street and 1st Avenue, Brooklyn, New York 11250.

**Colonel Frederick C. Goodwin, Ret.**, to 15 N. Village Green, Apt 253, Lawton, Oklahoma 73501.

**Colonel R. Joe Rogers**, as Chief of Staff, 1st Aviation Brigade, APO San Francisco 96384.

**Colonel Howard J. Tuggey**, as Commander, Aircraft Maintenance Brigade, Hunter Army Airfield, Georgia 31409.

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## AIR CAVALRY/Continued from P. 2

curity on a 24-hour basis. Throughout the evaluation the most notable of the Air Cavalry Troop's characteristics was its quick response capability, an illustration of which was the Troop's ability to clear an area in eight minutes when intercepted intelligence indicated an enemy nuclear attack.

The ability to attack targets of opportunity quickly and effectively within minutes of the receipt of spot reports from Scout aircraft was another indication of the Troop's quick-response capability. These findings were, for the most part, similar to the Air Cavalry Troop's proven abilities in the Vietnam environment.

The mid-intensity environment of Europe, however, with the expected density of enemy troops and their known anti-aircraft and radar capabilities, brought about a need for different techniques and tactics peculiar to that environment—most important of which were flight techniques. Nap-of-the-earth flying is a necessity in the European environment. Unlike Vietnam where most helicopter assault flying was done at altitude, the pilot in the European environment must fly in the nap-of-the-earth utilizing terrain features for cover and concealment.

### Enhanced survivability

The European terrain appears to enhance helicopter survivability, provided that nap-of-the-earth flying techniques are used. To become proficient in Air Cavalry operations in Europe it is obvious that all of our pilots must be made aware of and trained extensively in low-level flight and navigation, and in flying at night under adverse weather conditions.



Fl. Rucker — Under Secretary of the Army Kenneth E. BeLieu (r.), inspects a training aid at the Learning Center during a recent visit to the U.S. Army Aviation Center. Briefing him on a super 8-mm film track is Major Robert A. Gleason, officer in charge of the Learning Center. The under secretary also viewed students in training at the ranges and staged fields during his one-day visit to Fort Rucker.

(US photo)

The single light scout proved to be the most effective since pairs of scouts did not acquire any more targets than single helicopters, and statistics indicated that the pair was more likely to be acquired than single scouts. In spite of the density of opposing forces during the exercise, helicopters flying nap-of-the-earth were often heard but seldom seen. When seen, the light scout usually presented a fleeting target.

During the evaluation, light scouts enjoyed a freedom of acquisition on a three-to-one ratio, and a freedom of being undertaken under fire on a six-to-one ratio.

### Typical acquisition mission

It was found that the most effective tactic was to have the single light scout acquire a target. Flying nap-of-the-earth searching for enemy activity, he reaches the point of suspected enemy locations on the opposite side of a hill mass. Rather than risk observation by the enemy, he decides to utilize the dismounted observer technique. This technique is especially effective in fluid situations.

Having first searched this side of the hill mass, he lands as close to the crest as possible while remaining unobserved. The observer dismounts and with binoculars and map works his way to the crest of the hill where, from a concealed position, he is able to search the area beyond. The area does indeed contain an enemy position and the observer locates the position on his map, returns to the scout ship, and reports the location and target to the pilot.

The information is then relayed to the Troop Commander and the decision is made to engage the target. While the scout selects the firing position, the attack helicopter is alerted and is on its way to the rendezvous point. The scout then reconnoiters a concealed route to the firing position and meets the attack helicopter at the rendezvous point. Led by the scout, the attack helicopter arrives in the engagement area with minutes. With the scout standing by for the observation of additional targets, the attack helicopter moves to the firing position and utilizing the terrain to avoid skylining it rises to a hover and engages the target.

Although the hover provides a less stable firing platform the missile could be fired with little loss of accuracy as compared to a gun where the aircraft would be increasingly exposed to enemy fire. Gunships employing this tactic were acquired only 13% of the total mission time, and taken under fire on less than 6% of the mission.

### The Aerial Rifle Platoon

The Aerial Rifle Platoon was extensively used. On one occasion, the Troop was given a mission of securing a key bridge some 30 kilometers forward along the route of advance of friendly ground

(Continued on Page 22)





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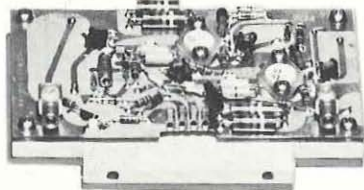
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# INTEGRATION IS THE KEYWORD

**C**ONVERSATIONS with ground commanders and aviators alike indicate to me that there is a tendency to forget what airmobility is. We tend to track off after individual equipment programs and philosophies and ignore the fact that the reason there is a gunship is because there is a liftship and a scout and a logistics carrier and a command and control aircraft.

If we follow such piecemeal approaches to aviation, we will *not* take advantage of the great mutual support that is available from aircraft which perform other functions of land combat.

Accordingly, I propose the following definition for airmobility:

*Quickening the tempo of combat operations through the use of organic, aerial vehicles operating in the land battle envelope and performing all five functions of combat in an integrated manner.*

The five functions, of course, are command and control, reconnaissance, logistics, and, that inseparable combination, firepower and maneuver. These functions relate to any type of combat whether it is performed by aviation or soldiers in tanks or on foot.

The first thoroughly integrated airmobile organization was the 11th Air Assault Division which became the 1st Cav Division for deployment to Vietnam. All other divisions became airmobile to a significant degree through the regular augmentation of aviation assets. The airmobile concept remains valid for combat anywhere else in the world; however, the tactics in employing airmobility naturally must be adjusted to meet the requirements of the local situation.

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**By Brigadier General  
William J. Maddox, Jr.  
Director of Army Aviation  
OACSFOR, DA**

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Let us not forget that *integration* is the key word in all aspects of aviation. We are not separatists in any respect. Airmobility is an integration of aircraft performing all the functions of combat. Airmobility should be integrated into other forces so that the overall force is stronger.

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## TRICAP Division Testing

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The TRICAP Division at Ft. Hood, Texas, is an excellent example of the integration of airmobility and standard ground elements. During February, the 1st Cav Division conducted Air Cavalry Combat Brigade platoon and company tests.

Airmobile landings of rifle elements were coordinated with the ground attacks of tank and mechanized infantry companies. Attack helicopters massed their rocket fires in the *QUICK DUMP* concept to repel enemy tank attacks. Air Cav harassed the enemy by fast raids behind enemy lines to gain intelligence and capture specific personnel and equipment. It is not hard to visualize such combat actions taking place in a European-type war.

I flew most of one night nap-of-the-earth behind liftships and gunships participating in the tests. *Colonels Ben Harrison and Joe Starker*, who are MASTER evaluators, flew with me. At dawn, I made a low-level cavalry penetration of the FEBA in a *Cobra* belonging to *LTC Jim Patterson*, commander of the 1st Squadron, 9th Cav. The enthusiasm and dedication of all participants were the overriding impression of the tests.

It was noted that some mention was made of the 1966-67 ARCSA II study as the basis for the aviation organization in tank and mechanized divisions. This study was an expedient designed to adjust resources for supporting the Vietnam conflict. As combat in Vietnam tapers off and units are redeployed, ARCSA II loses its validity. Therefore, it is appropriate to consider how aviation and airmobility can contribute more to our heavy di-



visions. The TRICAP testing should do much to provide the basis for TOE adjustments.

## D-Model Mohawk

While we are prone to talk in terms of helicopters these days, we must give great credit to the D-Model *Mohawk* airplane manufactured by Grumman. The basic *Mohawk* family includes the A-Model, Camera Version; B-Model, Side Looking Aerial Radar (SLAR); and C-Model, Infrared Version.

These aircraft served us well during most of the Vietnam conflict by providing excellent and responsive readout of enemy battlefield activity. The D-Model *Mohawk*, which contains new and significantly more perceptive sensors, has been deployed to Vietnam in recent months. The initial results of their combat operations are very encouraging.

Furthermore, the *Mohawk* is performing well in peacetime applications. I recently received a letter from COL Charles R. Roberts from the San Francisco Corps of Engineers District which cited Major George Baena, Commanding Officer of the 184th Military Intelligence Company (Aerial Surveillance) at Fort Lewis, Washington. Major Baena, who organized, trained, and shipped a D-Model company to Vietnam, now is performing geologic missions in northern California as part of his flying program.

COL Roberts states: "Basically we are extracting three kinds of information from the imagery that are normally not obtainable from conventional photography: recent geologic structure, subtle drainage and relief patterns, and soils classification. Imagery obtained to date has been very encouraging and ultimately will result in considerable savings to the government."

"We are also exploring the possible civilian applications of the *Mohawk* thermal IR system and preliminary imagery indicates the potential is great. We want to take this opportunity to extend our appreciation to you and to the entire 184th for the fine cooperation and support accorded us."

Incidentally, *Mohawk* aircraft have been provided other government agencies for border area narcotics control under the code name, GRASS-CATCHER.

## New Initiative Aerial Scout

With the advanced attack helicopter requirements evaluation (see February issue) well underway, it is appropriate to consider what the scout helicopter that will "run with the guns" should look like.

Our current scout helicopters, the Hughes OH-6 Cayuse and the Bell OH-58 Kiowa, were designed for the Vietnam environment. They lack the capability to operate under instrument conditions. They have no night vision capability, precise navigation, or survivability capabilities such as will be required in European-type combat.

Because technology is on the move in each one of these areas and substantially improved equip-

## CONTRACT AWARD

A five-year contract with an estimated value of \$97.6 million has been awarded to the General Electric Company, West Lynn, Mass., for the design, development, and qualification of the engine to be installed in the Army's Utility Tactical Transport Aircraft System (UTTAS), the proposed squad-carrying helicopter of the 1980s. The cost plus incentive fee contract provides for multiple incentives in the areas of cost and performance.

ment is becoming available, the Army decided last year to prototype our current scout helicopters as a new initiative in the budget. The new initiative aerial scout (NIAS) is not related to future production. Rather, it is to be a test bed incorporating a number of features which can be tested to determine what our future requirements really are.

The following list contains the type of items which could be placed aboard the NIAS:

Anti-Glare Windshield, Anti-Reflective Surfaces, Camouflage Paint, Infrared (IR) Counter-Measures, 7.62mm Ballistic Protection, and Crashworthy Fuel Cell (this program already is funded and underway).

Also, Secure Communications, Forward Looking Infrared Navigation and Target Acquisition Systems, IFR Instrumentation, Radar Altimeter, Radar Warning, and a Transponder. An additional option is a turret weapon.

The current T-63 Allison engine has been proposed for upgrading to 400 hp for the scout program. An additional proposal comes from Lycoming which could provide a new 590 hp engine in the NIAS.

The scout program will be competitive between the two current LOH manufacturers, Hughes and Bell. Each will utilize three aircraft so that the various combinations of new equipment can be tested. Present schedule calls for NIAS program to be completed in 1974. In the meantime, such essential production improvements as crashworthy fuel cells for current aircraft will continue.

Obviously, anyone who has flown or commanded aerial scouts has his own very personal opinion of what a new scout should contain. Therefore, a general officer in-process review was conducted in the Pentagon in mid-March to gain substantial agreement on the direction of the new program. Subsequently, contracts were signed with both Bell and the Hughes Tool Company.

## Instrument Qualification

We have had to amend our standardization and instrument qualification program due to the limitations to flying proficiency contained in PL 92-204 passed by Congress and implemented by DOD (see February issue).



## INTEGRATION/Cont. from Page 9

Now that the proficiency flying population has been reduced by those aviators in school over 90 days, those with over 15 years rated experience, and those who do not possess an aviation MOS or Prefix 6, we have lightened the load on units to qualify their members for instrument flight.

Therefore, the Department of the Army has dispatched a message to the field which should establish reasonable, attainable goals for the instrument flying program. The message states:

"1. In order to achieve full utilization of Army aircraft capabilities and to meet requests of mid-intensity warfare for dependable around-the-clock operations, Department of the Army has established the objective of a standard instrument qualification for every aviator. A follow-on training goal is to broaden his technical knowledge and to instill additional confidence in the equipment he operates.

2. Within the next several years, Army Aviation will be primarily rotary wing equipped with the exception of surveillance and administrative type aircraft which will comprise less than 10% of the total fleet. Therefore, our continuing goal is to qualify aviators in rotary wing aircraft and provide them with training which will lead to a standard rotary wing instrument rating.

3. In support of the above objective, a hardware distribution policy is presently in effect which will gradually phase out T-41, U-6, OH-23, OH-13, and TH-13 type aircraft. Additionally, action is being taken to equip the entire tactical fleet with an *Instrument Flight Rules (IFR)* capability. Plans for IFR instrumentation of the OH-58 and AH-1G are being reviewed and evaluated at this time.

4. Instrument waiver authorization granted major

commanders under AR 95-63 will remain in effect. However, approving authorities are cautioned to carefully consider requests which are not caused by justifiable shortages of aircraft assets or other valid constraints.

5. While instrument qualification is essential, it is equally important that individual aviators retain a high degree of professional competence for *Visual Flight Rules (VFR)* operations under decreased visibility and/or low ceiling conditions. It is therefore imperative that aviators are also proficient in executing nap-of-the-earth flying techniques unassisted by extensive electronic navigational aids.

6. Pending revision of ARs 95-1 and 95-63, the following requirements will become effective as indicated:

a. Qualification of all aviators with a standard instrument rating by 31 Dec 72.

b. Maintenance of a standard rating by all aviators otherwise required to maintain *Combat Readiness Flying (CRF)* minimums, in the category aircraft (helicopter or fixed wing) which is most appropriate to his TOE/TDA position or in the category aircraft which can be made available to those in staff or ground duty assignments.

c. Effective immediately, tactical instrument ratings will be upgraded to standard ratings prior to expiration date. All tactical ratings will lapse no later than 15 April 1973.

d. Priorities to requalify or qualify aviators for a standard rating are as follows:

(1) Aviators assigned to cockpit positions.

(2) Aviators in other aviation and aviation related assignments.

(3) Aviators in nonaviation related assignments."

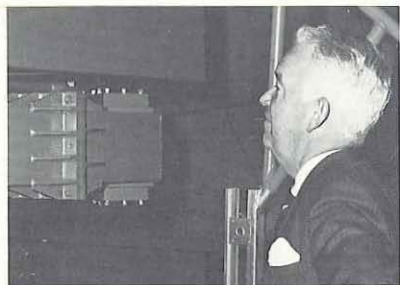
Normal school quotas are available to help lighten the unit training load. Also, the Department of Nonresident Instruction at Fort Rucker is prepared to dispatch a limited number of instrument training packets to requesting commands. Local reproduction of all of the Fort Rucker instrument training tests is encouraged.

## Advancing Blade Concept

The end of the anti-torque tail rotors on helicopters may be in sight. This would be welcome relief to the many aviators who have banged the tail rotor into trees, stuck it into flooded rice paddies and revetment walls, and otherwise worried about what they couldn't see when they were in confined areas.

The Army recently funded the Sikorsky Division of United Aircraft a contract for \$9.9 million to build a new research aircraft designated the Sikorsky S-69 which will be used to test fly the ABC (*Advancing Blade Concept*) rotor system.

The ABC consists of two counter-rotating, rigid rotors mounted co-axial to take advantage of the aerodynamic lift of the advancing blade in each disc. Conceptually, each advancing blade provides full lift capability without taking on the penalties



**FORMER** Secretary of the Army Stephen Ailes, now President of the Ass'n of American Flight roads, is shown viewing the Synthetic Flight Training System during a recent visit to Fort Rucker, Ala. He was one of 10 members of the HumRRO Board of Trustees who were given a general orientation tour of Rucker's facilities.



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of the retreating blade. In short, the effect of torque from one rotor disc is cancelled by the action of the other rotor disc.

The purpose of the program is to evaluate the performance of the *ABC system* in actual flight, hopefully confirming the dramatic advances in speed and maneuverability promised by previous research and development work.

Full-scale wind tunnel tests of the new rotor were conducted in a NASA wind tunnel. These tests verified the aerodynamic and structural performance potential of the system at speeds of up to 345 miles per hour.

The airframe of the research vehicle will be a two-place configuration. Initially, aircraft will be powered by a Pratt & Whitney PT-6 *Twin Pack*. Plans call for two additional Pratt & Whitney J-60 jet engines to be added later for an additional forward thrust as a high speed compound. The first flight of the S-69 is scheduled in August 1973.

The ABC contract is the largest research effort of its kind undertaken by the Army.

## FAMF

One of the Army's prime limited war support facilities, the *Floating Army Maintenance Facility (FAMF)*, is to be retained in the force structure at least through FY 73. The *FAMF*, as it has been known to thousands of mechanics and maintenance officers who depended on it for back-up depot type support, will be returning to its home port of Corpus Christi, Texas, when it completes its Vietnam tour.

The real name of the *FAMF* is *USNS Corpus Christi Bay*. This ship formerly served the Navy as the *USS Albemarle AV-5* and was obtained from the Maritime Commission where it was moth-balled. It was converted as an aircraft maintenance facility in the shipyard at Charleston, South Carolina, in December, 1965.

The *FAMF* then was transferred to the Military Sea Transport Service for Army use in January 1966. It departed for Southeast Asia a month later and operated off the coast of Vietnam at various points from Vung Tau to Da Nang.

The *Corpus Christi Bay* provided technical services not duplicated elsewhere in Vietnam or in USARPAC. It contained a complete metallurgical laboratory and chemical laboratory. Its physical facilities provided the only competent crash damage analysis capability in Vietnam. In CY 1969, about 40% of all crash damaged exhibits were analyzed on this ship. It contained a Sperry Rand computer, calibration laboratory, an extensive technical data library, and a printing capability which permitted the completion of complete data packages.

The direct support and general support capabilities of the *FAMF* will provide an add-on capability to the normal ARADMAC facilities at Corpus Christi. The strength level of the *FAMF* upon redeployment will be 210 military spaces and 10

civilian spaces to provide engineering and administrative capabilities for operation of the ship. By maintaining the ship at reduced strength in Texas, a nucleus of depot MOS skills will be available for ready deployment as the world situation dictates. The *FAMF* will have a 60-day readiness capability for dispatch to trouble spots.

## Performance

Any Army officer always hopes that his organization is performing to his standards and to the level of his ideals. This is the way I feel about Army Aviation and it grieves me when people complain about the quality of performance.

Recently I received a letter from three aviator Lieutenant Colonels who are serving overseas outside of Vietnam. They feel as I do that aviation performance should be of the highest caliber. They inclosed with their letter a portion of a handwritten note from an Army officer now serving in the Central Highlands. While I cannot vouch for the fact that aviation support has deteriorated in his area, I feel that his concern warrants airing in the Aviation Community.

If there are commanders who are telling their aviators to do a little less than the best and to rest on their laurels, those commanders do us a great disservice. As the old saying goes: any job worth doing is worth doing well. This saying applies to Army Aviation regardless of the phase of the war we are in. When you fly for the Army, you must fly with your whole heart. Here is an extract from the letter from Vietnam. Please give it some thought.

26 January 1972

"Dear . . .

Has the New Year settled into place yet? It is starting to get a little hectic over here (in USARV). Just changing jobs is part of it, I'm sure. It may be a relief after almost five months in the Central Highlands. The duty assignment wasn't bad, just long hours and the continuous hassle with assets.

For some people the war must be over. I have never had so many reasons for not wanting to fly missions. The aviation support and cooperativeness of the aviation personnel has certainly deteriorated in the last three years. The old "Can Do" attitude and esprit no longer exists.

It was getting to the point that I thought I would they would require a "prep" to land on the pad inside our compound. I never thought I'd see the day when personnel flying Cobra gunships would consider missions too dangerous, especially since the pilots who flew the old "C" model guns used to fly them as a matter of routine in 67-68.

I really can't include everyone in this as there were a few "diehards" who continued to produce. The slick pilots, though, were really reluctant to do much more than just drink coffee and blitch. . . ."

Can't we do better than this?

Good luck and heads up flying.



# Word to the Warrant



**G**ENTLEMEN, on behalf of *Brigadier General Eugene Forrester*, the Director of Officer Personnel, DA, I am delighted to have this opportunity to be here in USAREUR to talk with you about the *Aviation Warrant Officer Program*.

Before I begin, however, let me first put into perspective the position I occupy as Chief of the *Aviation Warrant Officer Branch*.

To begin with, all personnel management activities for active duty personnel in the Army are the direct responsibility of the Chief of Personnel Operations, (the COPO) who is *Major General Sid Berry*. *General Berry* has two major Directorates under his jurisdiction. The first is the *Enlisted Personnel Directorate*, headed by *Brigadier General Jack Pink* who handles all enlisted personnel matters at Department of the Army.

The second is the *Officer Personnel Directorate*, or OPD, headed by *General Forrester*, who is my direct boss. OPD handles all personnel matters pertaining to officers and warrant officers throughout the Army. The director has four deputies who coordinate policy matters across-the-board for all the branches. Within the Directorate itself are the sixteen officer branches of the Army as well as the Colonels Division, which as its name implies, handles only full colonels and Lt Colonels on the colonels promotion list.

The mission of the *Officer Personnel Directorate* is to insure that the valid personnel requirements of all Army units, world wide, are filled with qualified officers and warrant officers in order to accomplish the Army's missions. The Directorate develops the professional capabilities of the Army's officers through close and continuous monitorship of schooling and assignments.

## One of 16 branches

The *Aviation Warrant Officer Branch* is one of the sixteen officer branches of OPD and as such is on an equal status with all other officer branches. We are the only branch, however, which has only

warrant officers in our force and the only branch with strictly aviators to manage.

As the Chief of the *Aviation Warrant Officer Branch*, I have the responsibility, under *General Forrester*, for all aspects of personnel management of the more than 7,000 officers in the Branch. All manner of personnel actions, flight school input, retirements, releases from active duty, MOS reclassification, recalls to active duty, approval of VI category requests, RA applications, and many others are included in this responsibility.

In addition, we assign all aviation warrant officers to positions all over the world. In conjunction with these assignments, we program all aircraft transition training, all specialty skill training such as instrument examiner training, IP schooling, aviation safety training, and many others.

In our *Plans and Professional Development Section*, we select qualified individuals for civil and military schooling, to include attendees at the *Aviation Warrant Officer Intermediate and Advanced Courses*. Overall, we are responsible for the management and professional development of the Army's truly professional aviator, the *Aviation Warrant Officer*.

## The major actions

With that as a background then, I would like to discuss with you today some of the major actions in which we are currently involved in the *Aviation Warrant Officer Branch* as well as review some of the events of the past few years which have prompted these current moves, and then take a look at some of the prospects for the future for the aviation warrant officer as I now see them.

# Realistic optimism marks today's AWO program

**BY COLONEL THOMAS E. ANDERSON**  
Chief, Aviation Warrant Officer Branch, OPD, OPO, DA

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## **OPTIMISM** / Cont. from P. 13

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First, then, let's take a brief look at where we've been during the past few years. The Army's Aviation Warrant Officer strength began growing rapidly in 1966 to meet the demands of the hundreds of aviation units needed to support Vietnam requirements. From a strength of about 2,700 in mid-1965, the size of the warrant officer force tripled to nearly 8,100 by July 1968. By the middle of fiscal year 1969, warrant officer strength peaked out at nearly 12,500 aviators.

The past two years have seen an equally rapid decrease in the size of our force and by the end of this fiscal year we will be down to a strength of about 6,700. I anticipate that we will see a slight additional decrease during the next fiscal year.

The increases in warrant officer aviator strength during the peak years were paralleled by a corresponding growth in the commissioned aviator strengths. At the peak of Army aviation growth, we had nearly 9,000 aviators in Vietnam and a total strength of nearly 26,000 Army Aviators to support rotation of the force. The training effort to attain this size structure was monumental. In looking back, we found that we trained more Army Aviators during the past four years, (over 24,000) that we had trained during the previous sixteen years during which time about 18,000 aviators received their wings.

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### **Reduction in force**

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Then in 1969, the President's decision to scale down the U.S. involvement in Vietnam dictated a sharp reversal of the training effort. As force structure changes were prompted by withdrawal of U.S. units, the training rates also changed. As an example, in FY 69, nearly 4,000 warrant officer aviators received their wings. In FY 73, less than one-tenth of that number will be trained.

With the redeployment of units from Vietnam being accomplished on an accelerated scale, the size of the Army itself has been shrinking rapidly during the past year and a half. This reduction has posed some severe personnel management problems requiring difficult decisions. To meet our assigned end strength for the Branch by the end of this fiscal year, we have continued the early release programs from short tour areas; we have applied relatively liberal considerations to requests for voluntary withdrawal of VI status; we have reduced the annual training rates; we have severely limited the number of people allowed back into the force as recalls to active duty.

In spite of these measures, it became clear early in this fiscal year that we would not meet our end strength goals without some measure of actions to involuntarily separate people from the service. These have been difficult decisions and ones that have not been made without first exploring all other avenues to meet our assigned end strengths.

These involuntary terminations of active duty service have touched all levels of the Army structure from field grade, through company grade and warrant officer, down through the NCO ranks. Hopefully, we have now made all the aviation warrant officer strength cuts necessary to bring our end strength assets into balance with requirements. At this time, I know of no requirement which will make necessary further reduction-in-force measures in our Branch.

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### **Problem: Overtrained WOs**

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Going back for a minute to the point where the demands of Vietnam were at their peak, the requirement for a wide range of specific skills within the units in Vietnam forced us to train hundreds of individuals in advanced aviation skills as turn-around students fresh out of flight training. We have also trained hundreds of people as instrument examiners, IP's, and aviation safety officers during the past three years.

Additionally, to insure short tour equity and still meet the requirement for experienced aviators in Vietnam units, we provided advanced aircraft system training to hundreds of individuals in duplication of their previously acquired aircraft transition training. Many of our more senior warrant officers are now blessed with so much additional training that they become a real assignment problem, since we can normally only use one aircraft skill in conjunction with one ancillary skill for an individual assignment.

In other words, the man who is trained as an instrument examiner, safety and maintenance officer and is qualified in a wide range of aircraft in the inventory, is far too overtrained to be a useful asset in any but one of these skill areas. From an economic, operational and safety standpoint, we can no longer afford such training luxuries for our people.

Beyond that, however, such an individual does not have the opportunity to become technically proficient in any one particular area since he has so many skills. The number of aircraft and skill qualifications now held by our aviation warrant officers is close to the requirements of our baseline force structure.

A significant reduction in graduate flight training and ancillary skills is in the offing for the future and will be a major factor in the development of our career pattern program now being refined.

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### **Career force in making**

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The reduction in our total force has had some residual benefits for the branch, however. For example, in 1970, our career force (those people in a VI or RA status) numbered only about 25% of the entire force. This figure was a function of the large number of OBV officers serving their first three years of obligated service who had not been affected by the early release program. By the end



of this fiscal year, approximately 80% of our people will be in what we categorize as the career force.

This change in Branch profile has been primarily paced, of course, by the early release program whereby those individuals in a short-tour area have their option of being released from active duty at the end of their tour or being retained in a conditional VI status. This increase in the composition of the career force, coupled with a corresponding reduction in the number of short tour area requirements, has allowed us to resume planning for a more definitive career development pattern for our aviation warrant officers. Any of you who have looked at DA Pamphlet 600-11 recently know how out of date that career pattern outline is.

## Stabilized tours

We are now working on a revision to the patterns outlined in the Pamphlet. However, it has not yet been developed in sufficient detail to allow further discussion at this time. I plan to have more information for you in this regard within the next few months and you will be informed of our new approach to warrant officer career development through the Branch Newsletter and other trade publications.

In addition to being able to concentrate realistically on career planning for our people, the reduction in short tour requirements has also allowed us to provide more family stability in assignment planning than we have known for the past five or six years. We are now leaving all our people assigned here in USAREUR in place for a full three year tour, something we have not been able to do since 1965. Those people serving in CONUS who have completed two tours in Vietnam can also normally expect to remain at their duty stations for at least three years before we will begin to consider moving them.

Turn-around time between first and second short tours is now running over 24 months and we expect that this time will gradually lengthen. However, longer stability in assignment location will increasingly take priority over our previous policy of absolute equity in short tour assignments.

This increased stability has made side benefits: First, we are able to assign people more in line with their preference for duty station. This is not always possible but we have been able to fill requests in about 75% of the cases. Second, this added stability naturally enhances the family environment. Third, it provides the individual aviator time to pursue his civil educational goals, and I'd like to emphasize this point.

## Civil education

As you know, the Army has recently placed increased emphasis on education for all personnel, with a minimum goal of an Associate degree for warrant officers. Two programs, the *Officer Undergraduate Degree Program (OUDP)* and the *Degree*



**ABERDEEN PG** — The four stages of an Army Aviator, l-r, the New Aviator, the Cocky Aviator, the Wise Aviator, and the Professional Aviator are depicted at an aviation safety meeting by CWO Jack M. Dotterer, and CPTS Mark R. Furman, Frank J. Kazaitis, and Doug Cooper. The skits have livened up safety meetings for the 60-odd aviators assigned at the facility.

*Completion Program (DCP or Bootstrap)* are available to all qualified aviation warrant officers. These programs are available, however, only after an individual has completed the major portion of his academic courses on his own time. In addition, several sources of tuition assistance are available to you to build toward your educational goal.

This is the first year in which we have had the opportunity to offer any significant number of quota allocations to warrant officers for either OUDP or DCP. The selection standards are high and we use the quotas only for those with the most potential for future service. You people are far more aware of the specific courses of instruction available here in USAREUR than I am, but I cannot stress too heavily the importance of working on your civil education.

It stands to reason that a better educated soldier is a more effective soldier, not only in terms of job performance and self enrichment but also in long range potential service to the Army as well as our society as a whole. I can assure you that all nature of selection boards will be placing increased attention to civil education in the future.

## Flight pay equalization

Let me discuss for a few minutes some items of interest which usually generate questions to us at the branch.

One of the items most often brought up is that of *flight pay equalization*. As you know, the flight pay equalization proposal has been soundly endorsed by the Army and forwarded to the Office of the Secretary of Defense. OSD has just recently forwarded details of the proposal to the appropriate Congressional committees for information prior to submitting a formal legislative proposal.







## OPTIMISM/Cont. from P. 15

I have no indication as to how Congress will act on the issue. However the matter has at last finally reached the level at which an ultimate determination and change to existing pay scales can be made. This is a considerable step forward from the recommendation made by the Warrant Officer Study of 1967.

### W5 and W6 Supergrades

Warrant officer grades W5 and W6 have been reviewed several times since the 1967 study first proposed them. Each time the issue is restudied, it is determined that insufficient justification exists for adoption of these additional grades.

The key to W5 and W6 is in defining specific areas of increased responsibility for warrant officers. This has been difficult to do for a number of reasons, not the least of which is the lack of identification on authorization documents for different grades of warrant officers. In other words, the premise behind appointment as a warrant officer is the individual's technical expertise and performance in a given MOS.

Theoretically, a W1 should be as well qualified as a W4, and in most warrant officer MOS, other than aviation, this is essentially true. The aviator poses a dilemma in that he does not derive his initial appointment as a result of extensive previous enlisted training. He is appointed as an aviator

and subsequently progresses through various levels of skills and technical proficiency throughout his career. In order to justify the grades W5 and W6, it is necessary to define specific areas of added responsibility rather than merely as a reward for continued excellence in performance.

One other point to remember is that before the Army could get any additional warrant officer grades, the legislative package forwarded to Congress would have to have the concurrence of both the Navy and the Air Force. Such a concurrence would be extremely problematical. The issue of W5 and W6 is not dead, but neither is it currently under active study at this time by any DA agency.

### Grade identification

The subject of grade identification for warrant officers on TOE's and TD's is also one which has been under periodic study for several years. Again, the premise that a W1 is equally as qualified as a W4 has been the limiting factor in this issue and will probably continue to be the major road block to resolution of this matter.

With regard to additional MOS, similar problems exist. Any proliferation of the warrant officer MOS structure, in order to identify all warrant officer skills, has been resisted on several occasions. In my own mind, I'm not convinced that we need all the additional identification that have been proposed in the past. However, some additional suffix skill identifiers are necessary to accommodate the broadened scope of the aviation warrant officer career pattern.

These last few items all provide impetus to one of the fundamental precepts behind any form of personnel planning and that is the necessity to know the total requirement for various categories of people and skills. We have a continuing problem in determining specific requirements for such skills as IP's, SIP's, Instrument Examiners, Flight Safety Officers, and others simply because TOE's and TD's do not adequately reflect these requirements. This situation naturally impacts on our training forecasts. We know how many of each type we have, but we have a difficult, if impossible, time determining how many we need.

A ray of hope in this regard is a current ACSFOR action to identify specifically on all TOE's, positions for the warrant officer skills of instrument examiner, safety officer, and instructor pilot. Our branch comments to the proposal indicated the necessity to also include TD's in the revision, as well as to be able to identify requirements for a Standardization Instructor Pilot at the appropriate levels.

The last in-depth review of warrant officer policies and programs was made by the Army in 1966. Within the last month, the DCSPER requested comments on a proposal to again review the entire warrant officer program. Our office has provided input to the request for Essential Elements of Analysis from which this review will be made. I



**FT. WOLTERS** — Dignitaries attending the recent joint AAAA-AUSA dinner meeting of the Ft. Wolters Chapter are, l-r, BG William J. Maddox, Jr., Director of Army Aviation, guest speaker; LTC Clynne T. Jones, AAAA Chapter president; Paul Schneider, AUSA Chapter President; and BG Leo E. Soucek, CG of the USA Primary Helicopter Center and School. (USA photo)



might add, the catalyst behind the proposal to restudy the warrant officer structure was a Trip Report submitted by an aviation warrant officer who accompanied General Westmoreland on a trip to the Pacific in November of last year.

The Chief of Staff felt the items outlined in the Trip Report were of sufficient interest and urgency to merit the attention of the Army staff. The proposal has barely been conceived and I cannot forecast the depth or breadth that the review will take. I am extremely heartened, however, by the mere fact that these issues which I have outlined earlier which remain unresolved, will be studied as a collective package for the attention of the Army staff rather than as individual action proposals which must suffer through the maze of staff coordinations necessary to give them birth.

## Separate branch insignia

Some of the items which I feel should be included in this review have been brought up before and have not been successful, but perhaps the timing is better now.

For example, I feel we need a separate Branch insignia to identify the aviation warrant officer. We are the only officer branch in OPD without specific branch identification. In this respect, an earlier recommendation to allow non-aviation warrant officers to wear the same branch insignia as their commissioned branch counterparts still has merit. The insignia of grade and rank should be adequate to differentiate the warrant officer from the commissioned officer. I feel confident this issue will again be surfaced if a study group is formed to review the current warrant officer program.

Another vitally needed item for us in the *Aviation Warrant Officer Branch* is the ability to retain medically grounded aviators without forcing them either into MOS 671B or else out of the Army. Some people simply have no aptitude for maintenance nor any desire to serve in a maintenance position.

Currently the 671B MOS is the only safety valve we have available to keep these people in a productive branch assignment. Since the average aviation warrant officer has never acquired any other skill through the enlisted ranks, it is virtually impossible for any of the other branches to accept grounded aviators as branch transfers into their MOS skills.

I would suggest that there are several areas other than maintenance, within aviation related skills in which we could provide productive employment for our medically grounded aviation warrant officers and retain them on active duty within our Branch.

## Assignment preferences

Another area in which we have a keen interest in proposing changes is that of the *Officer Assignment Preference Sheet*. It would appear desirable to redesign the preference sheet to accommodate

Presentation made by Colonel Thomas E. Anderson at the AAAA USAREUR Region's 13th Annual Convention in Garmisch, March 9.

the very real differences in assignment requirements and considerations between commissioned officers and aviation warrant officers. The current DA Form 483 can only partially describe the options for assignment preference for our people.

The best method of information we now have available to indicate your specific preferences is through a personal letter to the Branch. This measure is not only unnecessary but is also time consuming to the individual as well as to the action officer in the Branch. We spend a great deal of time just decoding some of your handwriting and then sitting down and writing a personal response to each letter, even though in many cases no response is requested. A more efficiently designed form would solve many of the problems we now have with the Form 483.

I must emphasize however, that the Form 483 is all we have at this time and I urge you to use it as often as you like. The *Preference Statement* is the only means we have of determining your specific considerations in an assignment action.

## Four key factors

I am optimistic about the possibilities for some form of flight pay equalization but we will have to await a Congressional decision on this issue. I am considerably less optimistic about the chances for any addition to the warrant officer grade structure.

In summary, I see four key factors which will characterize our efforts in the immediate future. *First*, we must reduce training costs to the bare minimum in keeping with the increasingly close Congressional scrutiny of the defense dollar. *Second*, we must maximize the effective utilization of our present career force. *Third*, we must provide for adequate service attractions to enhance the retention of our already trained aviation warrant officers. *Last*, but certainly not least, we must provide a more realistic career development pattern which has visibility both to the individual aviator as well as to commanders and personnel managers at every level.

We are working on all four of these major issues. I am extremely optimistic about the future of the aviation warrant officer and his place as the truly professional Army Aviator.

This optimism must, of course, be tempered by the realities imposed by the shrinking size of the Army itself as well as the utilization parameters under which the warrant officer category of personnel is authorized.

If I were asked to describe one phrase which would best characterize my view of the aviation warrant officer structure of the future, it would have to be *realistic optimism*.

# The In Box

February 6, 1972

LTG Harry W. O. Kinnard, USA (Ret.)  
President, AAAA  
1 Crestwood Road  
Westport, Conn. 06880  
Dear General Kinnard:

After six years of continuous AAAA membership, I now have a need to see if my funds have been well spent. It's well known, the primary reason for belonging to clubs, lodges, is so people may combine their efforts to reach a common goal.

I, along with several thousand of my fellow officers, many of whom are aviators, are now undergoing a period of shock and mental stress created by the force reduction. We have had our security impolitely yanked from beneath our feet, and will soon attempt to invade the civilian world seeking employment.

I believe this force reduction will have greater impact on the American public than any previous action experienced by the Army. No one has stopped to think about the multitude of people who'll be involved in this reduction. Families, friends, relatives, casual acquaintances, observers, etc., are all deeply interested.

I believe the members of AAAA deserve to know more than what the Army cares to tell in their RIF letters to the personnel being released for "budgetary reasons."

It is highly doubtful that Army Aviation no longer needs pilots, mechanics, or school-trained maintenance officers, many of them rated in rotor and fixed wing aircraft. These people were trained at a tremendous expenditure to the American taxpayer.

I would like to know what action, if any, the AAAA plans to take to provide its members with acceptable answers to the force reduction.

Sincerely,  
CPT Jerry R. Brooks  
Ft. Leavenworth, KS.



**SAFE FLIER** — LTC Lloyd D. Smith, Jr., Director of Industrial Operations, Ft. Rucker, Ala., received a certificate of achievement recently. It recognized his record of more than 4,000 consecutive accident-free flight hours as an Army Aviator during the period from January, 1953 to December, 1971.

February 16, 1972

Dear Captain Brooks:

Your letter of 6 February was waiting for me when I arrived yesterday at my office in El Segundo. I was both touched and saddened by the obvious need of you and our fellow Army Aviators, and appreciative that you took the time to make this straightforward and obviously correct call for help to the AAAA.

Since receiving your letter yesterday I have been in touch with Art Kesten, Executive Vice President of the AAAA, and discussed possible actions the AAAA might take; so far we have come up with only two. First, I have called General Maddox, the Director of Army Aviation, to discuss what in-house Army actions have been or can be taken, directed at the problem which you raise. General Maddox indicated he plans to summarize these current or future actions and publish them in the next edition of "Army Aviation."

Secondly, I would like to forward your letter together with one to be signed by me to each AAAA chapter president urgently requesting that they provide all possible counsel and assistance to everyone in Army aviation seeking post-Army employment. To some extent, and varying with the chapters, this is already being done, but I want to make it a matter of special concern to the chapters and urge increased emphasis.

As an ex-Army Aviator now employed in the aerospace industry, I must underscore what you already know; these are not times in which the aerospace industry is on an ascendant course. On the contrary, most aerospace companies are still in a period of cutback and reduction, particularly in the more "old fashioned" aviation side of the house. I have personally had to inform countless highly-qualified individuals of the dearth of positions presently open to them.

Therefore, although fully realizing the truth of what you say about the big investment which the country and the taxpayers have made in the training of our Army Aviation people, the fact is that only a few of them will be able to find their way, at least in the near future, into related fields of industry.

Of possible interest to you in this regard is a speech which I made to the Smithsonian Institution in 1968 urging a national effort directed at solving in advance the very problem with which we are now confronted. Needless to say, the actions which I then recommended were not pursued by the Department of Transportation (and others). Therefore, and sadly, the problem which you so well outline is now upon us in full force.

In closing, I would like again to assure you of my personal concern which I know is that of the entire AAAA and would like to ask your permission to print your letter in the forthcoming issue of "Army Aviation" and also to ask your own personal recommendations as to any actions which you feel the AAAA might undertake in furtherance of your well stated need for help.

Sincerely,  
H. W. O. Kinnard  
President, AAAA

(Ed. Note: In his Director's Newsletter appearing in the February "Army Aviation," General Maddox responded immediately to General Kinnard's request by outlining the several DOD and DA programs designed to assist personnel being released from active duty. His lead article, "We Face



**Mandatory Strength Reductions,"** emphasized that aviators appeared to be faring somewhat better than their non-rated contemporaries in remaining on active duty.

While the AAAA does not administer a high-powered placement service as such, it does receive occasional industry requests for personnel with special qualifications. To the extent that it does reach key personnel in the aerospace industry, the AAAA magazine will henceforth offer gratis classified space to those separated or retired personnel seeking employment. Interested members are encouraged to forward 40-word "Position Wanted" ads (exclusive of name and address) to AAAA, 1 Crestwood Road, Westport, CT 06880, for publication in the subsequent issue.)

Dear Editor:

I'll be returning to Andrews AFB for duty this May, but I did want to tell you that I've enjoyed every minute of my tour here as Senior 'Copter Advisor for the VNAF 2nd Air Division. The Division, which has all the VNAF airpower for MR II, has one UH-1 Squadron here at Nha Trang, two at Pleiku, one about ready to become OR at Phu Cat, and one that will move to Phan Rang on 1 May. I'm now in the process of getting young VNAF pilots in CH-47 training with U.S. Army units.

What I'm leading up to is that my hat is off to Army Aviation! I have visited just about every Army Aviation unit (UH-1H) in MR II and every CH-47 unit left in all the MR's right now. Working with VNAF is not always easy, but the Army troops have consistently done a great job — from the ACs, IPs, and SIPs through the commanders. They've done much to make my job easier, and I could go on and on about their wonderful assistance.

My membership in AAAA — together with my knowledge of Army Aviation — has paid for itself on this tour! All is not stuffy or stiff and together we have a great time. You should see the look on their faces when I tell them that I have been an AAAA card-carrying member since '62, and have even autographed the ceiling at AAAA's National Office.

All in fun, but in being firm in my dealings with the Army Aviators here, I'm threatened with being given a nuisance award at a future convention. Never at a loss for words, this true blue aviator has come up with a new meaning for AAAA, the "Army's Attempt at Aviation!" Try that on for size!

LTC John M. Slattery, USAF  
AFAT 2, APO SF 96240

(Ed. Note: We thought all of his Army friends would like to know that the letterwriter, whom we all used to know as "Slat's," signed this letter, "Blades." See you in October, "Blades.")

Dear Editor:

I'm writing to your Ass'n to inquire if any of your members would be interested in purchasing a **TIGER MOTII**. The aircraft is in very good condition and has had little use in the last few years. If anyone is interested, I'd be happy to hear from them and if not, could you possibly advise me of whom to contact in the U.S. regarding the sale of this aircraft.

Yours faithfully,  
John P. Davies  
21, Glamis Street  
Kingsgrove, N.S.W. 2208  
Australia



## LTG John Tolson Receives Master Aviator Wings

FORT MONROE, Va. — An Army general has had the distinction of joining an elite group of seven general officers.

Lieutenant General John J. Tolson, Deputy Commanding General of the Continental Army Command (CONARC) (right, above), recently received his Master Aviator Wings in a ceremony hosted by CONARC Commander General Ralph E. Haines, Jr. (left).

"This is the most cherished of my awards since I've been an Army aviator," remarked Gen. Tolson, already the holder of the Army's top parachutist badge. "This award brings back a lot of memories of flying with young men all over the world," he continued.

A colonel at the age of 29, Gen. Tolson completed the Senior Army Officers Flying Course at Ft. Rucker, Ala., in June 1957, with both a fixed wing and rotary wing rating. Subsequently, he served two years as Assistant Commandant, U.S. Army Aviator School, and later went on to become the school's Commandant and Commanding General of the Aviation Center in 1965. He's also served as the Director of Army Aviation, OACSFOR, DA.

During his year and three months in Vietnam, the flying general logged approximately 1,100 hours flying time. Before coming to CONARC in 1971, Gen. Tolson commanded the XVIII Airborne Corps at Ft. Bragg, N.C.

Have you an interesting Army Aviation anecdote or episode to pass along? A humorous incident or a hairy flight experience? Get it down on paper in 400 words or less and send it in to **ARMY AVIATION** . . . We'll reimburse you at 5¢ a word!

## AIR CAVALRY/Continued from P. 4

forces. Using the Aerial Rifle Platoon, the bridge was secured within 20 minutes of receipt of the mission.

An additional effective use of the Aerial Rifle Platoon is its quick response capability in a tank ambush situation utilizing a ground-mounted anti-tank TOW missile system. The effectiveness of an anti-tank weapon in the Aerial Rifle Platoon remains clear! The light scout has acquired an ideal tank ambush situation. The Troop Commander, taking full advantage of the situation, has a TOW team and security squad airborne within minutes. The Aerial Scout then reconnoiters the field route to the ambush site and having met the lift ships at a predetermined rendezvous point, the Scout leads them in. The Scout signals the drop zone and the TOW team and the security squad are landed meters away from the ambush site.

The security squad then deploys on the landing zone while the helicopters move to a concealed area to await the pickup signal. The TOW team and the security squad move to the ambush site. Once in position and protected by the security squad, the missile launcher is quickly assembled. A target of opportunity develops into a successful ambush. Upon completion of the mission the Aerial Rifle Platoon, with its quick reaction capability, is ready to assume any other mission the Aerial Scouts may develop.

### The problem areas

These are the major highlights of the Air Cavalry Troop's ability to perform in the mid-intensity environment. Further analysis of the data collected during the evaluation, however, revealed some problem areas, as you might expect.



**Ft. Eustis —** Dr. Marvin E. Lasser (left), Chief Scientist, DA, presents 1971 R&D Achievement Awards to four AMRDL Propulsion Division engineers at the Eustis Directorate for their technological progress in the Army's 1,500 hp Demonstrator Engine Program. They are, l-r, Paul Chesser, LeRoy T. Burrows, Nicholas C. Kairos, and Henry L. Morrow.

Assembly area security was a major problem. It was found that the Air Cavalry Troop required an assembly area of roughly 75 acres, and area that was impossible for the Troop to secure. There are ways, however, of overcoming the security problem. The Troop could be positioned within the Squadron perimeter or broken down into teams that would operate from dispersed locations.

The first of these solutions raised additional problems of increased vulnerability while the latter increased the problem of command and control and logistical support. A camouflage net capable of concealing a helicopter, while being light and flexible enough for storage on the aircraft, could be a possible solution. Obviously, we are in need of solutions to the assembly area security problem. It seems that we have a lot of homework to do here.

With the congested road conditions during the initial phases of an outbreak of hostilities, logistical support would be a problem. Initially, the Troop could be expected to operate less than ten hours without supply. Therefore, aerial resupply is apparently a must with the Troop's ground vehicles being used as back-up support.

### Effectiveness at night

The capability of the Warsaw nations to conduct large scale offensive operations at night is an established fact. Realizing this, 10% of the mission hours and 5% of the Troop acquisitions and engagements throughout the evaluation occurred at night. Despite the training emphasis on developing tactics and techniques for night operations, the Air Cavalry Troop was much less effective at night. This is fundamentally an equipment problem. The evaluation was conducted using the eight Starlight scopes in the Aerial Rifle Platoon and the forward looking infrared mounted on the "H" model Huey.

An improved airborne night vision capability is a definite requirement for Air Cavalry operations. The evaluation results also proved there's a need for an airborne anti-tank weapons system with a capability, obviously, of the TOW. The effectiveness of the present M-22 weapons system is questionable, at best. The results achieved by the Air Cavalry Troop pilots who fired the system were even worse than the 40% first-round hit results achieved by CDC under ideal conditions and with highly proficient gunners.

Compare this with the German TOW firings conducted earlier this spring! Using "B" model gunships with operational crews, the firings were accomplished over a spectrum of ranges at both stationary and moving targets at altitudes of zero to 100 feet in all flight modes and achieved a 98% first-round hit probability. Aerial TOW systems were not available for the 4th Armored Division evaluation and, of course, this was surfaced as a requirement. We in Armor can extend this requirement to a true aerial tank killer — the fire and forget system.





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These, then, are highlights of both the capabilities and the problem areas revealed by the Air Cavalry Troop evaluation in Europe. There is no doubt that the objectives were met. There was also no doubt that the Air Cavalry adds a new and effective dimension to the mid-intensity environment of Central Europe.

We are by no means satisfied, however. Different tactics have resulted in the need for different training techniques. We at the Armor School have long recognized this need and our present officer and warrant officer programs and *Aerial Scout Observers' Courses* are training our personnel in proper observer techniques. Our planned *Attack Helicopter Training Course*, the POI of which was forwarded in March of 1971, combined with the *Aircrew Qualification Course* which is currently being finalized for submission to CONARC, will prepare our gunship crews for the operational techniques necessary in a mid-intensity environment. Our combat-experienced pilots, of course, must be made aware of the necessity of low-level flying and trained extensively in nap-of-the-earth flight and navigation.

Changes to the present TO&E, as recommended by the evaluation, are necessary for additional effectiveness and are being implemented. A solution must be found to enable the Troop to secure its assembly area and conceal its aircraft. In the logistical area we realize that the emphasis must be on aerial resupply. Our night fighting and night

operations must be enhanced, not only with intensive training but with additional equipment. Most importantly, however, we recognize the need for anti-armor capabilities in our attack helicopters in the Aerial Rifle Platoon and will continue to state the need.

### We've come full circle!

The concept of Air Cavalry operations is far ahead of the equipment required to exploit the potential capabilities of Air Cavalry. The experimentation continues very intensively for this evaluation was but an extension of the techniques established by General Howze in 1962. Nine years ago, the Howze Board established and tested these techniques which we have let slip into the background in the Vietnam years of unopposed, high-level flying.

We have come full circle since then and have brought the helicopter back to its most effective location—the ground environment. We at the Armor Center, which I prefer to call the Cavalry School—and without too much opposition so far locally—are extremely thrilled to be a member of the team investigating the possibilities of Air Cavalry. We are going to develop the most potent air cavalry, ground cavalry, armor-infantry team the world has ever known. There's no doubt in my mind about its success and success is going to come a lot sooner than a lot of us might expect.

# AAAA Activities

## MARCH-APRIL, 1972

■ **USAREUR Region.** 13th Annual Regional Convention. Members and members' families only. AFRC, Garmisch, Germany. March 8-11 (Ski Week, March 6-11).

■ **Hanau Chapter.** General membership social meeting during Garmisch Convention. Sheridan Plaza Hotel Lounge. 1900 hours. March 10.

■ **Cornhusker Chapter.** Lincoln, Nebr. Professional meeting. Lockheed Cheyenne film presentation. Week of March 10-17.

■ **David E. Condon Chapter.** Third Annual William B. Bunker Scholarship Formal Dinner-Dance in conjunction with the Fort Monroe Chapter. Fort Eustis Officers' Open Mess. 1900-2400 hours. March 13.

■ **Fort Leavenworth Area Chapter.** 1972 Aviator's Ball. Formal. FLOOM. 1830-0200 hours. March 18.

■ **Sharpe Army Depot Chapter.** '49'er Party. Western dress. Installation of '72-74 Chapter Officers. Prime Rib Inn, Stockton, Calif. 1830-2400 hours. March 18.

■ **Fort Benning Chapter.** Professional luncheon meeting. LTC Dick Roach, Dept of Standards & Instr Tng. USAAVNS, guest speaker. Bldg #73. 1200 hours. March 21.

■ **Aloha Chapter of Hawaii.** Professional luncheon meeting. Industry films. Wheeler Officers' Open Mess. 1130-1400 hours. March 23.

■ **Alamo Chapter.** Professional dinner meeting. BG Jonathan R. Burton, guest speaker: "The Changing Situation in Vietnam." Installation of '72-74 Chapter officers. Pavilion #3, MacArthur Park. 1830 hours. March 23.

■ **Lindbergh Chapter.** Professional dinner meeting. Clifford J. Kalista, VP, US Govt Mktg, and Leonard D. Kulik, Appl Engr, Bell Helicopter Company, guest speakers: "The Evolution of the King Cobra and Related Subjects." St. Louis Officers' Open Mess, GCAD. 1800 hours. March 23.

■ **Fort Bragg Chapter.** Business meeting, members only. Election-installation of '72-74 Chapter officers. 82d Abn Div Annex, 1630 hours. March 24.

■ **Greater Atlanta Chapter.** Professional dinner meeting. Clifford J. Kalista, VP, US Govt Mktg, Bell Helicopter Co., guest speaker: "King Cobra and UTTAS." ARB Room, FMOOM. 1830-2200 hours. March 24.

■ **Connecticut Chapter.** Professional dinner meeting. Richard J. Trainor, Director, Weapons Systems Analysis, Off, VcofS, DA, guest speaker. Installation of '72-74 Chapter officers. Frederick's Restaurant, Fairfield. 1830-2130 hours. March 29.

■ **Golden Gate Chapter.** Professional meeting and dinner dance. Cheyenne film and presentation by Lockheed-California representative. Fort Mason, Calif. 1830-2400 hours. March 31.

■ **Schwaebisch Hall Chapter.** Professional meeting. Lockheed Cheyenne film and presentation. John Crigler, guest speaker. Dolan Barracks NCO Club. 1600 hours. April 5.

■ **Southern California Chapter.** Professional dinner meeting. Joseph P. Cribbins, Director of Aviation Logistics, ODC-SLOG, DA, guest speaker. Sportsmen's Lodge, Studio City. 6-9:30 p.m. April 6.

■ **AAAA National Awards Committee.** Business meeting. Selection of 1972 AAAA Scholarship Award winners. Taft Room, Sheraton-Park Hotel. 1430-1700 hours, April 7; 0930-1530 hours, April 8.

■ **Latin American Chapter.** Business and professional meeting. Lockheed Cheyenne, King Cobra films; short business meeting. Albrook Officers' Open Mess. 1630-1915 hours. April 7.

■ **Washington, D.C. Chapter.** Professional-business luncheon. Installation of '72-74 Chapter officers. Fort Myer Officers' Open Mess. 1130-1400 hours. April 21.

■ **Aloha Chapter of Hawaii.** Business meeting, members only. Election and installation of '72-74 Chapter officers. Schofield Officers' Open Mess. 1700 hours. April 28.

### AAAA MEMBERSHIP REPORT

(Totals as at 15 March 1972)

#### MILITARY MEMBERSHIP

(90.6% of total AAAA Membership)

Rank or Grade	U.S. Army	ARNG-USAR	Ret.	Total
GEN .....	1	0	1	2
LT GEN .....	10	0	1	11
MG .....	23	1	8	32
BG .....	22	6	8	36
COL .....	264	12	86	362
LT COL .....	1,476	28	330	1,834
MAJ .....	1,329	58	98	1,485
CPT .....	2,301	128	10	2,409
LT .....	330	28	0	358
CWO .....	1,732	109	66	1,907
WO/WOC ....	769	32	2	803
ENL .....	340	14	9	363
DAC .....	875	0	0	875
Totals .....	9,472	379	617	10,477

#### NON-MILITARY MEMBERSHIP

(9.4% of total AAAA Membership)

Aviation Industry .....	795
Misc. (Honorary, other svcs, widows, etc.) .....	282
Total .....	1,077

#### TOTAL AAAA MEMBERSHIP

Military membership (90.6) .....	10,477
Non-military membership (9.4) .....	1,077
Total AAAA membership .....	11,554

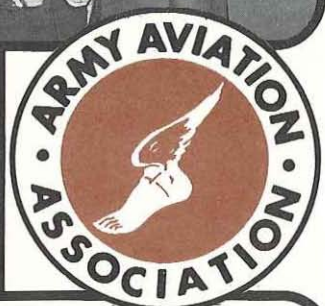


**FORT EUSTIS** — 1Lt Donald E. Bailey (right), distinguished graduate of AMOC Class 8-72, receives his diploma and an AAAA "Certificate of Achievement" from LTC Charles M. Priem, Deputy Director, DPCA. The David E. Condon Chapter of Quad-A sponsors the latter award as a sustaining program. →



**FORT MONROE** — A visiting fireman for the day, COL Harry L. Jones (left), President of AAAA's David E. Condon (Ft. Eustis) Chapter, discusses the details of the chapter's forthcoming Third Annual William B. Bunker Memorial Scholarship Ball with LTC Ronald Jones, President of the nearby Ft. Monroe Chapter.

**ST. LOUIS** — Sergei Sikorsky, guest speaker at a Lindbergh Chapter Quad-A meeting, holds a model Gateway Arch and key to the city given to him by Mark Hilbert (right), VP, Programming, following his presentation. COL Richard L. Long, Ret., AAAA Past President (far left) and COL John Geary, acting Chapter President, flank the visiting UAI executive. →



**HUNTER-STEWART** — Shown during a recent AAAA meeting are three visiting Bell executives. From left are Clifford J. Kalista, VP, US Govt Mktg; Hans Weichsel, Jr., Exec VP; BG Eugene M. Lynch, CG, USAFTC&FS, their host; and James M. Atkins, Bell Helicopter President. The three were on hand to hear the presentation of COL William F. McKeown, the HLH Project Manager at Hq, AVSCOM.



# Masters All!

A compilation of photographs of the award of the Master Army Aviator Badge, Army Aviation's most coveted wings. Most of the photos were taken recently; some are delayed.



**ST. LOUIS** — LTC Ulysses S. Large, Jr. (r.), Hq, AVSCOM, received Master Wings from Master AA #1, LTC Robert R. Williams, the Asst Chief of Staff for Force Development.



**FT. BRAGG** — "Congratulations!" says MG George S. Blanchard (left), CG of the 82d Avn Div, as CW4 James K. Turney, 82d Avn Bn, receives his Master Aviator badge.



**FT. BELVOIR** — LTC John Norton (left), CG of the USA Combat Developments Command, is shown after presenting Master AA wings to LTC Harry D. Painton of Hqs, USACDC.



**FT. EUSTIS** — LTC Blair E. Smith (right), is welcomed into the Master AA ranks by COL John R. Adie, director, Eustis Directorate, USA Air Mobility R&D Laboratory.



**FT. WOLTERS** — LTC James O. Frownfelter (left), new Master AA, is congratulated by BG Leo E. Soucek (right), CG of the U.S. Army Primary Helicopter Center and School.



**THE PENTAGON** — LTC Kenneth E. Kellogg (left), Directorate of Aviation Logistics, ODCS-LOG, received his Master wings from Joseph P. Cribbins, Director of Aviation Logistics.



**DAYTONA BEACH** — There's no doubt about the award LTC William W. Redman, Jr. (r), a student at Embry-Riddle, received from COL Frank H. Forrest, ex-AA and an ERAU V.P.



**FT. LEAVENWORTH** — LTC Ralph W. Broman (right) is congratulated by BG James M. Gibson, Deputy Commandant, USAC&GSC, on joining the Master Army Aviator ranks.



# Takeoffs

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**SYMBOLIC** — BG Eugene M. Lynch (left), CG of the USAFTC at Hunter-Stewart, Ga., presents a giant wrench symbolizing the Aircraft Maintenance Brigade to outgoing Commander, COL Albert A. Johnson, Jr. (center), as the new Head Mechanic, COL Howard J. Tuggey (right) looks on. (USA photo)

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**OUTSTANDING GRADUATES** — Wearing their engraved AAAA wings, the distinguished graduates of the March 7 rotary wing classes at USAAVNS are, from left, 1LT Ronald C. Winters (ORWAC), 2LT David A. Lukash (AFORWAC), and WO1 Anthony G. Kraay (WORWAC). (US Army photo)

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100% — Joining AAAA 100%, 32 members of WORWAC Class 71-45 are shown at USAVNS. A \$64 membership incentive refund check was presented to WOC Gregory C. Dobbs (front row, left) class leader, for the all-out support. W2 James K. Kloss, Opns O of the 61st Company, is shown at the right.

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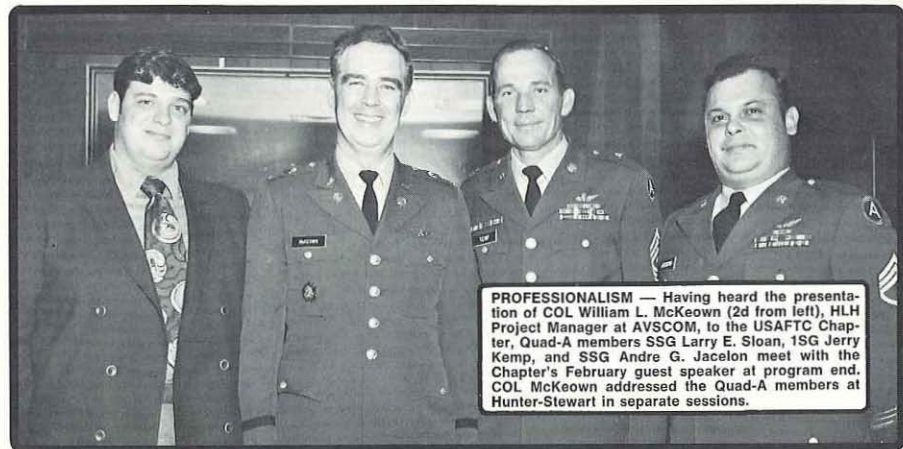
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**PROFESSIONALISM** — Having heard the presentation of COL William L. McKeown (2d from left), HLH Project Manager at AVSCOM, to the USAFTC Chapter, Quad-A members SSG Larry E. Sloan, 1SG Jerry Kemp, and SSG Andre G. Jacelon meet with the Chapter's February guest speaker at program end. COL McKeown addressed the Quad-A members at Hunter-Stewart in separate sessions.

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#### OBITUARIES

KING, Mrs. Mary Ann (nee Gallagher), died at Patrick Air Force Base, Florida, on December 8, 1971. She is survived by her husband, Lieutenant Colonel Edward J. King, of the Plans Office, Aberdeen Proving Ground, Aberdeen Proving Ground, Maryland; two sons, Edward and Douglas; and a daughter, Patricia. Interment took place at Arlington, Virginia.

# ARMY AVIATION

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